

REMARKS/ARGUMENTS

Status of the Application

In the Office Action, claims 14 and 15 were allowed; claims 1-4, 7, and 9-13 were rejected; and claims 5, 6, and 8 were objected to. Applicants note that the Examiner indicated that claims 5, 6, and 8 are allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

No amendments to the claims have been made. Thus, claims 1-15 are pending.

Rejections Under 35 U.S.C § 103(a)

Claims 1-3 and 9-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Shinohara (U.S. Patent No. 5,877,769) in view of Numata et al. (U.S. Patent No. 6,539,325).

In rejecting claims 1-3 and 9-13, the Examiner bases the *prima facie* case on the assertion that Shinohara can be combined with Numata et al. These references, however, simply cannot be combined. Shinohara discloses an image processing apparatus and method for generating reflections of objects on a reflection surface. The objects, which already exist as part of a program stored in ROM (col. 5, lines 19-21), are displayed on an applicable display element (e.g., a computer monitor or a television). There is no disclosure, however, of acquisition or analysis of objects outside of those already contained in ROM. Objects already in data are three-dimensional (Shinohara uses a house, a building, and trees as examples; col. 3, lines 52-54) and are rendered with polygons, a typical method of displaying three-dimensional objects in video games (col. 3, line 64 – col. 4, line 12). Polygons are comprised of vertex data, which at least includes attribute data such as X, Y, and Z coordinates; vertex color; texture coordinates; vertex perspective; and normal vector (col. 5, lines 26-29). Shinohara image analysis method generates an image of the rendered three-dimensional object for eventual display on a reflective surface, e.g., a building with a reflective glass exterior (col. 3, lines 56-57).

Numata et al. disclose “a color matching apparatus for automotive repair paints which enables even unexperienced [sic] personnel to perform color matching of a repair paint, whether containing a metallic or pearlescent pigment or not

containing a metallic or pearlescent pigment, in a reduced number of steps and with high precision in a short time” (col. 3, lines 31-37). As described in the Response to the April 25, 2003, Office Action, Numata et al. achieve this objective through a color matching apparatus for automotive repair that comprises a computer, a color display, a spectrophotometer capable of color measurement at a plurality of viewing angles, and an electronic balance (col. 3, lines 41-44). This apparatus calculates a paint formula, particularly the color and flop influencing constituents of the paint formula, on the basis of a spectrophotometric color measurement, comparing this measurement with data in a color database comprising assigned paint formulas. Thus, the user can calculate the paint formula that matches the color shade of the surface to be repair coated.

Data analyzed and stored by Numata et al. thus relates to formulation of colorants with optional metallic or pearlescent components in a repair coating for matching with an automobile’s color. The information used to create a paint formula, e.g., spectral reflectance and flop value, are not “objects” within Shinohara’s definition of an object, i.e., a three-dimensional structure capable of being rendered with polygons. There is no disclosure in Numata et al. of the generation of a computer image of a coated three-dimensional object because Numata et al. only describe the calculation of a paint formula based on the comparison of spectrophotometric data taken by color measurement of a coated surface to be repair painted and colorimetric data stored in a database and assigned paint formulations. Further, no mention of the creation of three-dimensional objects is given anywhere in the Numata et al. disclosure. At most, Numata et al. utilizes data having a single dimension, coating thickness (col. 9, line 20). It is difficult to imagine how the Shinohara processing system designed to generate reflections of three-dimensional objects can generate image data based on the paint formula data supplied by Numata et al. Thus, Applicants respectfully submit that Shinohara cannot be combined with Numata et al.

Claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Shinohara in view of Numata et al. in further view of Rupieper et al. (U.S. Patent No. 5,991,042). Because claim 4 is a dependent claim, which recites even further limitations to claims that have already been traversed, Applicants rely upon the


arguments presented above in rebuttal to the Examiner's assertion that claim 4 is unpatentable.

Claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Shinohara in view of Numata et al. in further view of allegedly admitted prior art (i.e., the BYK-Gardner Wave-Scan Product). Because claim 7 is a dependent claim, which recites even further limitations to claims that have already been traversed, Applicants rely upon the arguments presented above in rebuttal to the Examiner's assertion that claim 7 is unpatentable.

Summary

In view of the foregoing amendments and remarks, Applicants submit that this application is in condition for allowance. In order to expedite disposition of this case, the Examiner is invited to contact Applicants' representative at the telephone number below to resolve any remaining issues. Should there be a fee due which is not accounted for, please charge such fee to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

Respectfully submitted,

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